

DROUGHT.

In Kans., Nebr., S. Dak., Iowa, north Tex., Ind. T., Ky., Ill., and south Mich. the drought was broken by rain during the early part of the month, and in Ohio the rains of the middle of the month ended the dry spell in that region. In S. Dak. late crops were reported injured. In southwest Minn. the drought was very severe and streams were reported very low. In Ohio great injury was caused to corn, potatoes, and fruit. In

southern Mich. potatoes, fruit, and berries were affected. In east and central Va. the month was unusually dry, and corn and vegetation were damaged.

PRAIRIE FIRES.

Prairie fires caused considerable damage in parts of Mont. and S. Dak., in Ford and Edwards counties, Kans., and in McCulloch Co., Tex.

VERIFICATIONS.**FORECASTS FOR 24 HOURS IN ADVANCE.**

[Verifications made by Assistant Professor C. F. Marvin, assisted by Mr. H. E. Williams, chief clerk of the Forecast Division.]

The forecasts for districts east of the Rocky Mountains for August, 1890, were made by Captain H. H. C. Dunwoody, 4th Artillery, Signal Officer, and those for the Pacific coast districts were made at San Francisco, Cal., by 2d Lieutenant John P. Finley, Signal Corps.

Percentages of forecasts verified, August, 1890.

States.		States.	
Maine.....	80.1	Kentucky.....	83.6
New Hampshire.....	82.7	Ohio.....	86.5
Vermont.....	82.8	West Virginia.....	78.4
Massachusetts.....	83.8	Indiana.....	84.9
Rhode Island.....	84.4	Illinois.....	88.3
Connecticut.....	75.9	Lower Michigan.....	86.1
Eastern New York.....	80.1	Upper Michigan.....	79.0
Western New York.....	84.5	Wisconsin.....	84.4
Eastern Pennsylvania.....	85.9	Minnesota.....	82.1
Western Pennsylvania.....	83.7	Iowa.....	80.1
New Jersey.....	83.3	Kansas.....	84.0
Delaware.....	83.7	Nebraska.....	82.4
Maryland.....	82.1	Missouri.....	85.8
District of Columbia.....	81.7	Colorado.....	85.1
Virginia.....	84.9	North Dakota.....	83.9
North Carolina.....	84.6	South Dakota.....	77.0
South Carolina.....	82.2	Southern California*.....	89.8
Georgia.....	87.2	Northern California*.....	90.2
Eastern Florida.....	93.6	Oregon*.....	85.7
Western Florida.....	85.0	Washington*.....	87.3
Alabama.....	80.6	By elements: Weather.....	86.0
Mississippi.....	87.7	Temperature.....	81.5
Louisiana.....	88.9	Monthly percentage of weather and	
Texas.....	90.6	temperature combined.....	84.2
Arkansas.....	87.4		
Tennessee.....	86.8		

*In determining the monthly percentage of weather and temperature combined, the Pacific coast states are not included. †The forecasts of temperature in districts east of the Rocky Mountains for August, 1890, were made with reference to the maximum temperature alone; that is, a prediction of warmer or cooler indicated that the maximum temperature of the day designated would be higher or lower than the maximum of the previous day. ‡The monthly percentage of weather and temperature combined is determined by multiplying the percentage of weather by 6, and the percentage of temperature by 4, and dividing their sum by 10.

FORECASTS FOR 48 HOURS IN ADVANCE.

Appreciating the great importance that long time predictions possess for the general public the Chief Signal Officer has authorized forecasts for 48 and 72 hours, covering the 2d and 3d days in advance. These are optional with the forecast official, and are only made when clearly in the public interest, and cover, in all cases, considerable areas of country, and are not confined to localities.

Percentages of verifications of forecasts made for second day in advance. Number of predictions made: weather, 18; temperature, 26. Percentages of verifications: weather, 58.1; temperature, 65.4; weather and temperature combined, 61.8. No forecasts for 72 hours were made during the month.

CAUTIONARY SIGNALS FOR AUGUST, 1890.

Statement showing percentages of justifications of wind signals for the month of August, 1890:

Wind signals.—(Ordered by Captain H. H. C. Dunwoody.) Total number of signals ordered, 51, of which 32 were justified as to velocity, and all as to direction. Of the signals ordered, 50 were cautionary signals, of which 31 were justified, and one was a storm signal which was justified. 11 signals were ordered for easterly winds, and 40 for westerly winds, all of which were justified. Percentage of justifications, 62.5. No cold-wave signals were ordered during the month.

Percentages of verifications of weather and temperature signals reported by directors of the various State Weather Services for August, 1890.

States.	Weather.	Temperature.	States.	Weather.	Temperature.
Illinois.....	85.6	87.3	Nebraska.....	80.6	89.0
Iowa.....	81.6	93.2	New Jersey.....	75.9	85.8
Louisiana, northern.....	88.0	96.0	North and South Dakota....	92.0	92.0
Louisiana, southern.....	79.0	92.0	Ohio.....	84.0	88.0
Minnesota.....	69.0	73.0	Pennsylvania.....	82.0	85.0
Missouri.....	85.0	87.0	South Carolina.....	94.5	79.1

STATE WEATHER SERVICES.

[Temperature in degrees Fahrenheit; precipitation, including melted snow, in inches and hundredths.]

The following extracts and summaries are republished from reports for August, 1890, of the directors of the various state weather services:

ALABAMA.

The weather was unfavorable to the cotton crop, as it favored the development of rust, which caused considerable damage.

Temperature.—Highest monthly mean, 80, at Livingston; lowest monthly mean, 72.1, at Chepultepec; maximum, 97, at Eufaula, 7th, and at Marion, 27th; minimum, 50, at Florence, 28d, and at Double Springs, 31st.

Precipitation.—Greatest monthly, 7.80, at Florence; least monthly, 0.07, at Pine Apple.

Wind.—Prevailing direction, southwest.—Prof. P. H. Mell, Auburn, director; J. M. Quarles, Private, Signal Corps, assistant.

ARKANSAS.

Temperature.—The mean was about 2.0 above the normal; maximum, 104, at Lead Hill, 8th; minimum, 50, at Forrest City, 18th; greatest local monthly range, 46, at Lead Hill; least local monthly range, 19, at Winslow.

Precipitation.—The average was about 0.86 above the normal; greatest monthly, 10.52, at Winslow; least monthly, 0.15, at Malvern.—M. F. Locke, Commissioner of Agriculture, Little Rock, director; W. U. Simons, Sergeant, Signal Corps, assistant.

COLORADO.

Temperature.—The mean was 4.0 above the average for the last 4 years; highest monthly mean, 76.7, at Lamar; lowest monthly mean, 48.9, at Climax; maximum, 104, at Bennet, 6th, and at First View, 7th; minimum, 24, at Alma, 25th; greatest local monthly range, 66, at Julesburg; least local monthly range, 30, at Cumbres.

Precipitation.—The rainfall was 0.10 above the average for the last 4 years; the amount ranged from 5.41, at Watervale, to trace, at Westcliffe.

Wind.—Prevailing direction, west.—Prof. F. H. Loud, Colorado Springs, director; W. S. Miller, Sergeant, Signal Corps, assistant.

ILLINOIS.

Temperature.—The mean was 2.8 below the normal of the past 15 years; maximum, 104, at Atwood, East Peoria, and Pontiac, 3d; minimum, 40, at Aurora, 23d.

Precipitation.—The average was 0.86 below the normal of the last 12 years; greatest monthly, 7.06, at Jordan's Grove; least monthly, 0.95, at Collinsville.

Wind.—Prevailing directions, southeast and northwest.—*John Craig, Sergeant, Signal Corps, Springfield, in charge.*

INDIANA.

Temperature.—Highest monthly mean, 74.0, at Marengo, Shelbyville, and Muncie; lowest monthly mean, 65.0, at Maury; maximum, 100, at Huntingburgh, 1st, and at Angola, 3d; minimum, 40, at Delphi, 23d; greatest monthly range, 55 at Delphi; least monthly range, 32, at Butlerville.

Precipitation.—Greatest monthly, 8.20, at Marengo; least monthly, 2.50, at Columbia City.

Wind.—Prevailing direction, southwest.—*Prof. H. A. Huston, La Fayette, director; H. R. Patrick, Private, Signal Corps, assistant.*

IOWA WEATHER AND CROP SERVICE.

Temperature.—There was a general deficiency in temperature. There have been but two cooler Augusts in Iowa within the last twenty years, but the frost line was only barely touched on a few dates during the month, and no material damage has been reported; highest monthly mean, 73.6, at Glenwood; lowest monthly mean, 63.9, at Cresco; maximum, 102, at Belle Plaine, Blakeville, Glenwood, and Washington, 2d; minimum, 36, at Atlantic, 14th; greatest local monthly range, 63, at Atlantic; least local monthly range, 38, at Independence and Iowa City.

Precipitation.—The average was slightly below the normal; greatest monthly, 6.44, at Manson; least monthly, 1.02, at Omaha, Nebr.

Wind.—Prevailing direction, south.—*J. R. Sage, Des Moines, director; G. M. Chappel, Sergeant, Signal Corps, assistant.*

KANSAS.

Temperature.—Highest monthly mean, 81.7, at Kellogg; lowest monthly mean, 70.2, near Concordia; maximum, 115, at Kellogg, 9th; minimum, 40, at Lakin, 27th and 28th; greatest local monthly range, 66, at Lakin; least local monthly range, 39, at Collyer; greatest daily range, 46, at Gibson, 12th; least daily range, 7, at Leavenworth, 19th.

Precipitation.—Greatest monthly, 11.00, at Columbus; least monthly, 0.10, at Winona.

Wind.—Prevailing direction, southeast.—*Prof. J. T. Lovewell, Topeka, director; T. B. Jennings, Sergeant, Signal Corps, assistant.*

KENTUCKY.

Temperature.—The mean was about 3.0 below the normal; maximum, 101, at Pellville, 1st and 3d; minimum, 44, at Harrodsburgh, 31st; greatest monthly range, 56, at Harrodsburgh; least monthly range, 33, at Franklin.

Precipitation.—The average was about 2.50 above the normal; this excess was confined to the eastern and southern portions of the state, elsewhere it was nearly normal; greatest monthly, 8.68, at Mount Sterling; least monthly, 3.80, at Frankfort.

Wind.—Prevailing direction, southwest.—*Dr. E. A. Grant, Louisville, director; Frank Burke, Sergeant, Signal Corps, assistant.*

LOUISIANA.

Temperature.—The mean was nearly normal; highest monthly mean, 88.6, at Mandeville; lowest monthly mean, 76.5, at North Louisiana Experimental Station; maximum, 102, at Cameron, 21st; minimum, 59, at Minden and Liberty Hill, 30th; greatest local monthly range, 40, at Liberty Hill and Coushatta; least local monthly range, 19, at Abbeville.

Precipitation.—The average was nearly 1.00 above the normal; greatest monthly, 10.79, at Plaquemine; least monthly, 0.62, at Shreveport.

Wind.—Prevailing direction, south.—*R. E. Kerkam, Sergeant, Signal Corps, New Orleans, in charge.*

MICHIGAN.

Temperature.—The mean was 4.3 below the normal of the last fifteen years; highest monthly mean, 69.2, at Benton Harbor; lowest monthly mean, 57.5, at Crystal Falls; maximum, 104, at Bangor, 3d; minimum, 30, at East Lothrop and Roscommon, 23d; greatest local monthly range, 68, at Paw Paw; least local monthly range, 31, at Atlantic; greatest daily range, 43, at Clinton, Flint, and Roscommon, 26th; least daily range, 1, at Bellaire, 9th.

Precipitation.—The average was 0.10 above the normal of the last fifteen years; greatest monthly, 7.41, at Washington; least monthly, 1.28, at Weldon Creek.

Wind.—Prevailing direction, northwest.—*N. B. Conger, Sergeant, Signal Corps, Lansing, director.*

MINNESOTA.

Temperature.—The month was cooler than usual, and the deficiency in temperature was from 2.5 to 4.5 in various sections of the state; highest monthly mean, 66.2, at La Crosse, Wis.; lowest monthly mean, 59.1, at Pokegama Falls; maximum, 97, at Grand Meadow, 2d, and at Morris, 7th; minimum, 30, at Saint Vincent, 22d; greatest local monthly range, 62, at Saint Vincent; least local monthly range, 38, at Lake Winnibigoshish Dam; greatest daily range, 45, at Saint Vincent, 5th; least daily range, 3, at La Crosse, Wis., 12th, and at Duluth, 18th.

Precipitation.—The rainfall was slightly in excess in the central counties, in the upper and lower portions there were deficiencies of about 10 per cent., and in the vicinity of Saint Paul the deficiency amounted to 40 per cent.; greatest monthly, 3.96, at Red Wing; least monthly, 1.64, at Montevideo.

Wind.—Prevailing direction, southeast.—*John Healy, Corporal, Signal Corps, Saint Paul, in charge.*

MISSISSIPPI.

Temperature.—The mean was 1.9 below the normal; highest monthly mean, 81.6, at Moss Point; lowest monthly mean, 72.6, at Corinth; maximum, 100, at Columbus, 21st; minimum, 48, at Corinth, 26th; greatest monthly range, 48, at Corinth; least monthly range, 18, at Pearlinton.

Precipitation.—The average was 1.47 above the normal; greatest monthly, 8.29, at Louisville; least monthly, 0.50, at Kosciusko.

Wind.—Prevailing direction, variable.—*R. B. Fulton, Signal Corps, University, director.*

METEOROLOGICAL REPORT OF THE MISSOURI STATE BOARD OF AGRICULTURE.

Temperature.—The mean was about 2.5 below the normal in all parts of the state; highest monthly mean; 78.9, at Bradleyville; lowest monthly mean, 69.8, at Glenwood; maximum, 106, at Princeton, 3d; minimum, 41, at Glenwood, 20th; greatest local monthly range, 60, at Glenwood; least local monthly range, 30, at Lebanon and Bradleyville.

Precipitation.—The average was about 0.75 above the normal; greatest monthly, 15.89, at Sarcoxie; least monthly, 1.10, at Wither's Mills.—*Levi Chubbuck, Secretary of State Board of Agriculture, Columbia, director; A. L. McRae, Sergeant, Signal Corps, assistant.*

NEBRASKA.

Temperature.—The mean was 1.5 below the normal; the maximum, 108, occurred at several stations early in the month; and the minimum, 34, is lower than any August minimum, except that of 1888, which was the same.

Precipitation.—The rainfall was quite evenly distributed; from 1.00 to 3.00 fell over the greater part of the state.—*Prof. Goodwin D. Swezey, Crete, director; G. A. Loveland, Sergeant, Signal Corps, assistant.*

NEVADA.

Normal temperature, numerous thunder-storms, and heavy rains were the features of the month.

Temperature.—Maximum, 110, at El Dorado Canyon, 19th; minimum, 28, at Elko, 26th; greatest local monthly range, 75, at Elko; least local monthly range, 34, at Younts' Ranch; greatest daily range, 55, at Pioche; least daily range, 15, at Beowawe.

Precipitation.—Greatest monthly, 8.44, at Tuscarora; least monthly, 0.10, at Verdi.

Wind.—Prevailing directions, south and southwest.—*Prof. Charles W. Friend, Carson City, director; H. E. Wilkinson, Corporal, Signal Corps, assistant.*

NEW ENGLAND METEOROLOGICAL SOCIETY.

Temperature.—The mean was 1 below the normal; highest monthly mean, 70.8, at Olneyville; lowest monthly mean, 59.9, at Berlin Falls; maximum, 94, at Plymouth, N. H., 4th, and at Lawrence, 5th; minimum, 32, at Berlin Falls, 16th; greatest local monthly range, 61, at Berlin Falls; least local monthly range, 25, at Nantucket; greatest daily range, 44, at Plymouth, N. H., 17th; least daily range, 1, at Cotuit, 9th.

Precipitation.—The average was 0.80 above the normal; greatest monthly, 8.85, at Stratford; least monthly, 2.05, at Block Island.

Wind.—Prevailing direction, southwest.—*Prof. William H. Niles, Boston, Mass., president; Prof. Winslow Upton, Providence, R. I., secretary; J. Warren Smith, Private, Signal Corps, assistant.*

NEW JERSEY.

Temperature.—The mean was 0.5 below the normal; highest monthly mean, 76, at Trenton; lowest monthly mean, 68.5, at Newton; maximum, 99, at Beverly, 1st; minimum, 40, at Newton, 23d; greatest local monthly range, 54, at Beverly, 1st; least local monthly range, 28, at Ocean City; greatest daily range, 83, at Tenafly and Gillette, 17th; least daily range, 8, at Asbury Park, 18th.

Precipitation.—The average was 0.16 below the normal; greatest monthly, 7.51, at Atlantic City; least monthly, 2.89, at Woodbury.

Wind.—Prevailing direction, northwest.—*E. W. McGann, Sergeant, Signal Corps, New Brunswick, in charge.*

NEW YORK.

Temperature.—Highest monthly mean, 72.4, at New York City and Fort Wadsworth; lowest monthly mean, 59.9, at Keene Valley; maximum, 100, at Marshland, 4th, and at Madison Barracks, 5th; minimum, 38, at Hyndsville, 23d; greatest local monthly range, 61, at Hyndsville and Marshland; least local monthly range, 32, at Setauket.

Precipitation.—Greatest monthly, 9.46, at Marlborough; least monthly, 0.80, at Madison Barracks.

Wind.—Prevailing direction, west.—*Prof. E. A. Fuertes, Ithaca, director; I. G. Gardiner, Corporal, Signal Corps, assistant.*

NORTH CAROLINA.

Temperature.—The mean was 2.3 below the normal; highest monthly mean, 78.6, at Kitty Hawk; lowest monthly mean, 67.4, at Highlands; maximum, 98, at Kitty Hawk, 1st, and at New Berne, 17th; minimum, 40, at Highlands, 12th; greatest local monthly range, 50, at Douglas; least local monthly range, 19, at Hatteras.

Precipitation.—The average was 0.75 below the normal; greatest monthly, 10.72, at Willeton; least monthly, 2.80, at Franklin.

Wind.—Prevailing direction, southwest.—*Dr. Herbert B. Battle, Raleigh, director; C. F. von Herrmann, Sergeant, Signal Corps, assistant.*

NORTH AND SOUTH DAKOTA.

Temperature.—The mean was 0.5 below the normal; greatest monthly, 72.0, at Fort Sully, Saint Lawrence, and Spearfish, S. Dak.; lowest monthly mean, 59, at Gallatin, N. Dak.; maximum, 105, at Highmore, S. Dak., 5th; minimum, 31, at Webster, S. Dak., 22d; greatest local monthly range, 72, at Woonsocket, S. Dak.; least local monthly range, 35, at Wild Rice, S. Dak.

Precipitation.—The average was about 0.81 below the normal; greatest monthly, 3.39, at Webster and Wild Rice, S. Dak.; least monthly, 0.04, at New England City, N. Dak.

Wind.—Prevailing direction, southeast.—*S. W. Glenn, Sergeant, Signal Corps, Huron, S. Dak., in charge.*

OHIO.

Temperature.—The mean of the northern section, the middle section, the southern section, and of the state was 0.9, 0.8, 1.1, and 0.9, respectively, below the average for the sections and state; maximum, 103, at North Lewisburgh, 3d; minimum, 40, at Wooster, 24th; greatest daily range, 44.1, at Wauseon, 12th; least daily range, 4, at Hanging Rock, 14th.

Precipitation.—The precipitation was largely in excess of the usual amount in all sections, the average for the northern section, the middle section, the southern section, and the state, was 1.04, 0.88, 2.05, and 1.33, respectively, above the normal for the sections and state; greatest monthly, 8.88, at Georgetown; least monthly, 1.93, at Hudson.

Wind.—Prevailing direction, southwest.—*Prof. B. F. Thomas, Columbus, director; Lieut. Charles E. Kilbourne, secretary; C. M. Strong, Corporal, Signal Corps, assistant.*

OREGON.

Temperature.—The mean was about the normal; highest monthly mean, 74.4, at Hood River; lowest monthly mean, 59.0, at Gold Beach; maximum, 100, at McMinnville and Grant's Pass; minimum, 33, at North Powder.

Precipitation.—The average was 0.48 below the normal. Over 1.00 fell along the extreme northwest coast, and in parts of the state from trace to 0.79.

Wind.—Prevailing direction, northwest.—*Hon. H. E. Hayes, Master State Grange, Oswego, director; B. S. Pague, Sergeant, Signal Corps, assistant.*

PENNSYLVANIA.

Temperature.—The mean was 2.0 below the normal; highest monthly mean, 73.6, at Philadelphia; lowest monthly mean, 60.1, at Wellsborough; maximum, 98, at New Castle, 3d, and at Gettysburgh, 6th; minimum, 34, at Somerset, 24th; greatest local monthly range, 29, at Huntingdon; least local monthly range, 13, at Erie; greatest daily range, 47, at New Castle, 16th; least daily range, 2.0, at Grampian Hills, 21st.

Precipitation.—The average was over 1.50 above the normal; greatest monthly, 9.65, at Carlisle; least monthly, 2.58, at Philadelphia.

Wind.—Prevailing direction, west.—*Under direction of the Franklin Institute, Philadelphia; T. F. Townsend, Sergeant, Signal Corps, assistant.*

SOUTH CAROLINA.

Temperature.—The mean was 0.4 above the normal of the last 3 years; highest monthly mean, 80.0, at Port Royal; lowest monthly mean, 72.1, at Camden; maximum, 96, at Blackville, 1st; minimum, 51, at Yorkville, 24th; greatest local monthly range, 44, at Cheraw; least local monthly range, 18, at Timmonsville.

Precipitation.—Greatest monthly, 7.95, at Winnsborough; least monthly, 1.61, at Port Royal.

Wind.—Prevailing direction, south.—*Hon. A. P. Butler, Columbia, director; G. E. Hunt, Sergeant, Signal Corps, assistant.*

TENNESSEE.

The meteorological conditions were for the most part near the normal, except the period of low temperature during the last two decades, and the rainfall, which was considerably above.

Temperature.—Highest monthly mean, 77.0, at Union City and Memphis; lowest monthly mean, 69.6, at Andersonville; maximum, 99, at Watkins, 4th; minimum, 48, at Nunnally, 12th, at Andersonville, 25th, and at Hohenwald, on the 24th and 31st; greatest local monthly range, 49, at Hohenwald; least local monthly range, 29, at Covington; greatest daily range, 40, at Hohenwald, 24th; least daily range, 2, at Nunnally, 5th, Ashwood, 7th, Florence Station, 26th, and at Knoxville, Jacksboro, and Rugby, 28th.

Precipitation.—Greatest monthly, 9.91, at Springdale; least monthly, 2.76, at Rockwood.

Wind.—Prevailing direction, southwest.—*J. D. Plunket, M. D., Nashville, director; H. C. Bate, Signal Corps, assistant.*

TEXAS.

Temperature.—The temperature was slightly below the normal, except in the extreme western portion, where the normal prevailed; highest monthly mean, 87.5, at Haskell; lowest monthly mean 75.6, at Panhandle; maximum, 106, at Haskell, 30th; minimum, 51, at Panhandle, 8th; greatest local monthly range, 52, at Coldwater; least local monthly range, 16, at Corpus Christi and La Grange.

Precipitation.—The rainfall was deficient, except in a few localities near the coast and over the northwestern portion of the state, where the amount equalled, and in a few instances, exceeded, the normal; greatest monthly, 6.29, at Orange; least monthly, 0.40, at Weatherford.—*D. D. Bryan, Galveston, director; I. M. Cline, Sergeant, Signal Corps, assistant.*

Meteorological record of Army post surgeons, voluntary, and other co-operating observers, August, 1890.

Stations.	Temperature. (Fahrenheit.)			Precip'n.		Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean.				Max.	Min.	Mean.	
Alabama.	0	0	0	Ins.		California—Cont'd.	0	0	0	Ins.
Bermuda *†	90	64	77.0	2.31		Brentwood	100	62	80.5	0.00
Camden	91	60	74.0	0.65		Brighton	100	63	75.9	0.00
Citronelle	96	62	80.7	5.13		Byron	100	62	78.2	0.00
Columbia	93	55	76.3	4.78		Caliente	102	70	79.3	0.00
Decatur (1) †	91	53	74.3	4.77		Calistoga	93	48	67.8	0.00
Decatur (2) †	94	50	75.5	4.22		Castroville	78	51	62.8	0.00
Double Springs †	91	53	74.3	4.77		Centerville	98	60	71.2	0.00
Enfusa	97	58	78.9	7.01		Chico	104	60	79.5	0.00
Evergreen †	94	59	79.0	5.83		Cisco	82	50	63.9	0.00
Livingston (1) *	89	70	79.4	3.71		Colfax	98	58	75.5	0.00
Livingston (2) †	93	57	77.5	3.96		Corning	111	65	83.3	0.00
Marion †	97	55	78.6	1.94		Crescent City	103	55	75.1	0.06
Mt. Vernon B'ks.	94	60	78.0	3.84		Delta	103	55	75.1	0.00
Opelika †	97	58	77.6	5.75		Downey	98	60	74.2	0.00
Pine Apple	95	55	78.8	0.70		Dunsmuir	91	62	76.7	0.05
Selma (2) †	95	58	80.0	4.05		Elmira	103	60	74.1	0.00
Tusculum (2) †	94	52	75.7	5.85		El Verano	95	52	67.7	0.00
Valley Head †	92	50	71.6	4.71		Espartero	98	60	79.0	0.02
Alaska.						Evergreen	102	61	76.6	0.00
Juneau	70	43	55.6	2.21		Farmington	102	61	76.6	0.00
Arizona.						Felton	98	54	73.6	0.00
Ariz. Canal Co. dam.	107	70	83.8	1.80		Fernando	106	60	78.0	0.00
Ash Canyon	107	70	83.8	1.80		Florence	97	64	72.3	0.00
Ash Creek	107	70	83.8	1.80		Folsom	102	65	80.8	0.00
Ash Springs	107	70	83.8	1.80		Fort Bidwell	91	44	68.7	0.05
Benson	98	70	81.9	4.81		Fort Gaston	102	41	71.3	T.
Bisbee	84	56	70.0	5.71		Fort Mason	76	48	58.7	0.02
Casa Grande	108	74	86.9	3.41		Fruto	108	61	84.5	0.00
Chino	91	56	75.3	3.90		Galt	104	62	81.2	0.00
Chiri Cauha M't's	107	70	83.8	1.80		Georgetown	100	58	76.1	0.00
Cooley's †	85	44	64.2	4.60		Gilroy	94	49	73.0	0.00
Crittenden	107	70	83.8	1.80		Girard	94	52	66.2	0.00
Dragon	107	70	83.8	1.80		Glen Ellen	97	55	76.1	1.37
Dos Cabezas †	107	70	83.8	1.80		Goshen	98	51	65.6	0.00
Eagle Pass	107	70	83.8	1.80		Grass Valley	108	62	81.5	0.00
Florence	107	70	83.8	1.80		Haywards	98	55	65.4	0.00
Fort Apache	91	51	70.5	4.16		Hollister	98	52	66.5	0.00
Fort Bowie	88	56	71.7	4.06		Hornbrook	96	48	72.1	0.46
Fort Grant	90	54	72.6	4.54		Hydesville	76	39	59.2	0.00
Fort Huachuca	89	54	71.2	5.49		India	114	75	90.9	0.10
Fort Lowell	101	63	80.2	5.58		Iowa Hill	96	56	75.9	T.
Fort McDowell	110	68	86.1	1.55		Julian	87	60	71.4	1.25
Fort Mojave	112	70	89.9	1.50		Keeler	100	75	85.6	1.30
Fort Verde	104	58	78.2	2.30		Keene	98	62	75.3	1.40
Gila Bend	104	78	88.4	3.90		Kingsburg	105	62	82.7	0.00
Grand Central Mill	104	78	88.4	3.90		King City	96	46	68.6	0.00
Holbrook †	95	53	73.6	2.57		Knight's Landing	94	60	74.7	0.00
Lochiel	85	62	70.5	7.18		La Grange	111	55	80.6	T.
Mariaca	105	78	89.7	4.49		Laurel	95	59	69.8	0.00
Mount Huachuca	85	51	70.6	4.46		Lemoore	110	60	80.4	0.00
Natural Bridge	104	60	82.9	1.69		Lewis Creek	100	61	70.9	0.00
New River	104	60	82.9	1.69		Livermore	98	56	81.7	0.00
Pantano	102	63	78.4	6.30		Livingston	106	60	83.6	0.00
San Carlos	101	62	82.8	2.46		Long Beach	90	60	71.7	0.00
San Simon	101	62	82.8	2.46		Los Angeles	99	61	74.7	0.00
Show Low †	106	68	87.4	3.17		Los Banos (2)	103	69	85.3	0.02
Signal	106	68	87.4	3.17		Los Gatos (1)	95	55	70.3	0.00
Strawberry	106	68	87.4	3.17		Los Gatos (2)	93	45	67.7	T.
Tevison	106	68	87.4	3.17		Mammoth Tank	116	75	93.1	0.00
Tip Top †	106	68	87.4	3.17		Martinez	82	54	68.4	0.00
Tombsone	96	57	75.6	6.26		Menlo Park	92	52	66.3	0.00
Tucson (1) †	99	66	81.7	5.23		Modesto	103	63	78.3	0.00
Walnut Grove	104	58	78.3	5.73		Mojave	104	68	83.9	0.00
Walnut Ranch	104	58	78.3	5.73		Monterey	86	50	61.0	0.00
Wilcox	98	60	77.2	5.20		Napa	99	51	67.3	0.00
Wilgus	104	60	82.9	1.69		Newark	90	55	68.5	0.00
Arkansas.						Niles	92	55	69.1	0.00
Arkansas City †	105	65	83.9	0.00		Norwalk	102	53	74.9	0.00
Camden †	105	65	83.9	0.00		Oakland (1)	80	50	62.2	T.
Dardenelle	105	65	83.9	0.00		Oakland (2)	76	54	60.3	0.00
Devall's Bluff	94	50	77.6	1.17		Ogilby	119	82	91.5	0.05
Forrest City †	94	58	76.8	3.44		Ontario	102	70	82.1	0.16
Fulton	105	65	83.9	0.00		Orville	99	60	79.8	0.00
Helena (1) †	98	58	78.6	4.23		Pajaro	80	48	61.3	0.00
Helena (2)	98	58	78.6	4.23		Paso Robles	99	52	70.3	0.00
Hot Springs	98	58	78.6	4.23		Petaluma	94	53	66.4	0.07
Lead Hill	104	58	78.3	5.73		Placerville (1)	101	52	72.8	0.00
Little Rock B'ks.	99	59	78.9	1.90		Placerville (2)	94	46	70.0	T.
Malvern	94	60	78.8	0.15		Pleasanton	95	41	67.5	0.00
Newport (1) †	93	55	75.6	4.63		Pomona	103	63	75.1	0.00
Newport (2)	93	55	75.6	4.63		Porterville	106	70	85.0	0.15
Pine Bluff	96	60	80.3	0.78		Presidio of S. F.	82	45	57.6	0.00
Preacott	94	64	79.6	1.66		Puente	102	65	76.2	0.00
Russellville	96	60	78.8	6.47		Ravenna	100	60	78.1	0.00
Texarkana	98	60	81.5	0.76		Red Bluff	103	64	82.2	0.00
Winslow	84	65	74.5	10.52		Redding	112	60	83.9	0.00
California.						Riverside	105	52	75.8	0.55
Alcade	105	65	83.9	0.00		Rocklin	105	60	79.8	0.00
Alcatraz Island	68	43	56.9	0.00		Rumsey	102	65	82.7	0.00
Almaden	93	53	68.6	0.00		Sacramento (1)	90	46	66.8	T.
Anaheim	104	62	75.5	0.00		Salinas (1)	75	52	59.8	T.
Angel Island	83	47	60.6	0.00		Salinas (2)	68	55	60.4	0.00
Antioch	94	68	76.1	0.00		Salton	113	75	89.3	0.37
Aptos	90	50	62.6	0.00		Sanger Junction	105	65	87.2	0.00
Athlone	110	60	81.7	0.00		San Ardo	102	48	73.1	0.04
Auburn	98	55	75.1	0.00		San Diego B'ks	89	59	71.0	T.
Bakersfield	103	71	87.1	0.03		San Gabriel	102	60	75.9	0.00
Barstow	106	58	82.7	0.15		San Jose	90	50	66.8	0.00
Belmont	90	54	68.9	0.00		San Mateo	85	52	65.3	0.00
Benicia Barracks	97	51	68.0	0.00		San Miguel	100	55	71.6	0.00
Berendo	108	62	83.0	0.00		San Pedro	100	63	74.7	0.00
Berkeley	83	52	60.3	0.00		Santa Ana	106	60	76.1	0.00
Boulder Creek	108	42	66.5	0.00						